The Printer's One Plan Approach to the OSHA Hazard Communication Program, the EPA Emergency Response Plan, and the EPA Risk Management Plan

By Debra Jacobson, PNEAC

Virtually all printers are required by Occupational Safety and Health Administration (OSHA) to develop a written Hazard Communication Program, and most printers are required by OSHA to develop a written Emergency Action and Fire Prevention Plan. However, only a portion of the printers in the United States are required by the Environmental Protection Agency (EPA) to develop an Emergency Response Plan, and even fewer will be required to comply with the Section 112(r) regulations that go into affect June 21, 1999 which requires affected facilities develop a Risk Management Plan. This fact sheet briefly discusses the elements of each set of rules and then explains how printers can satisfy each of these requirements (as applicable) in one written plan.

OSHA Hazard Communication Standards (29 CFR 1910.1200)

The Hazard Communication Standard is intended to address the issue of potentially hazardous chemicals in the work place and informing employees of the specific hazards and protective measures that must be undertaken when using, handling and/or storing these products. Some requirements of the Standard include: developing and maintaining a written hazard communication program, including lists of hazardous chemicals in the work place; providing employees access to material safety data sheets (MSDS), training (and documenting training) employees about the hazards of the chemicals they are or may be exposed to and protective measures that must be undertaken; and labeling of containers in the work place.

Employers are required to develop a *written Hazard Communication Program* which at least includes the following (29 CFR 1910.1200(e(1)-(5)):

1. List of hazardous chemicals in the workplace. This includes product mixtures, etc.
2. A description of how the employer will communicate the potential hazards of routine and non-routine tasks. This includes a description of the employee hazard communication training program.
3. Procedures for communicating hazards in the work place to individuals not employed by the company, but working in the facility (visitors, suppliers, contractors, etc.). This includes informing them about any personal protective measure that need to be taken, and the company's labeling system.
4. A description of how the MSDS will be made available to employees and visitors.
5. The company's container labeling policy and procedures.
6. Procedures for obtaining, maintaining, and providing employees access to MSDS

Note: Additional requirements apply to companies who manufacture or distribute products which contain hazardous materials. See 29 CFR 1910.1200 for additional requirements.

Labeling (29 CFR 1910.1200(f)(1)-(11))

A written labeling policy and procedure should be established and **all** containers of hazardous chemicals used in the work place must be labeled, tagged or marked with the name of the product or chemical, appropriate hazard warnings (i.e., flammable liquid). The hazard warnings can be indicated by words, pictures, symbols or a combination thereof. There are some exceptions to the labeling requirements which apply to stationary

process containers (tanks, etc). Exceptions also apply to solid materials which contain hazardous materials. The labeling policy and training are a requirement of the Hazard Communication Program.

MSDS (1910.1200 (g)(1)-(11))

Printers who employ one (1) or more individuals are required to maintain a MSDS for each product that contains hazardous chemicals at the facility. Each MSDS has eights sections, must be written in English (and other languages if desired), and must contain the following information: 1) name of product on the label; 2) chemical name and % content of substances that have been determined by OSHA to be a health hazard; 3) chemical and common name of all ingredients which are considered a physical hazards (this includes section II - VII of the MSDS - See supplemental PNEAC fact sheet for more information)

The MSDS information must be readily accessible to all employees during their work hours when they are in their work area.

Copies of MSDS must be maintained on site for 30 years or as long as the company is in business. Copies of obsolete MSDS from products that are no longer used or where the MSDS has been revised must also be retained. The MSDS are a requirement of the Hazard Communication Program.

Employee information and training (1910.1200(h)(1)-(3))

Employees must be informed/trained about the hazardous chemicals in their work area when they are initially hired or when they are initially assigned to an area where hazardous chemicals are used, handled or stored. Employees must also be trained when new products containing hazardous chemicals are introduced in the work place.

The training must include how to determine the presence of a leak or spill, information on the specific physical and health hazards of the chemicals in the work area; personal protection procedures and equipment needed to prevent exposure; and the details of the hazard communication program. The training must also cover the company labeling system and how employees can obtain and use the hazard information in the MSDS. The training is a requirement of the Hazard Communication Program. All training records must be retained.

OSHA Emergency Action Plans and Fire Prevention Plans (29 CFR 1910.38)

Any facility who employs more than 10 people must develop a written Emergency Action and Fire Prevention Plan. Facilities who employ less than 10 people do not have to develop a written plan, however they are required to verbally communicate emergency action procedures to each employee. The written plan should cover emergencies that an employer may reasonably expect to occur in the work place. Examples are: fire; toxic chemical releases; hurricanes; tornadoes; blizzards; floods; and other disasters. At minimum the plan must contain the following elements:

1. Emergency escape procedures and designated emergency escape routes (evacutation maps).
2. Procedures to be followed by employees who remain in the building to operate critical plant operations before they evacuate. For example, department supervisors instructed to shut down critical pieces of equipment.

3. Policies and procedures for employees designated to perform rescues and provide medical care.
4. Procedures to account for all employees after the evacuation is completed.
5. The preferred means of reporting fires and other emergencies.
6. Names of persons or departments that can provide additional information about the policies, procedures and duties under the plan.
7. An emergency alarm system must be provided in accordance with 1910.165.
8. If a fire brigade has been established, and an alarm is used to activate the brigade, the sound of the signal must be distinctive for each purpose that it is used for.
9. Emergency evacuation guidelines and procedures must be included in the plan.
10. A sufficient number of employees must be designated and trained to assist with safe and orderly evacuation of employees.
11. The emergency action plan must be reviewed with each affected employee when the plan is is initially developed or when the person is hired; whenever the employees responsibilites or designated actions under the plan change. Employees must also be trained on how to protect themself in the event of an emergency.
12. Fire prevention section which contains the following elements:
    a. A list of major workplace fire hazards and proper handling and storage procedures, potential ignition sources and their control procedures, and the type of fire protection equipment or system which can control a fire involving them.
    b. Names or job titles of personnel responsible for the maintenance of equipment and
    c. Names or job titles of personnel responsible for control of fuel source hazards.
    d. Housekeeping procedures to control accumulation of flammable and combustible waste materials and residues.
    e. Employees must be informed/educated about the potential fire hazards associated with materials and processes to which they are potentially exposed.
    f. Upon initial assignment (initial hire or job responsibility change) employees must be trained on the specific elements of the fire prevention plan that may affect them so that the employee knows how to protect himself/herself in the event of an emergency.
    g. An equipment maintenance program covering equipment and systems installed on heat producing equipment to prevent accidental ignition of combustible materials must be implemented and a written program must be included in the fire prevention plan.

Hazardous Waste Operations and Emergency Response (HAZWOPER) (29 CFR 1910.120)

The HAZWOPER regulations apply to facilities who generate and store hazardous waste on site and are considered a Large Quantity Generator as defined by EPA regulation. The standard requires employers to develop a written plan that provides for emergency response measures that will be taken in the event of a spill or leak of hazardous material. The employer is also required to designate employees to be a member of an emergency response team (Hazmat Team) and provide the required training or contract with a company who will be responsible for cleaning responding in the event of a spill or release of hazardous materials. There is a written policy option that can act as the exception to comprehensive plan requirements, see 29 CFR 1910.120(q)(1).

A written safety and health program must be designed to identify, evaluate, and control the safety and health hazards which employees on the Hazmat team may be exposed to. The program must contain the following elements: 1) Organization structure; 2) Comprehensive work plan; 3) The site specific safety and health plan

that addresses hazards identified at a site and specific procedures and policies related to hazardous waste clean-up activities (see full standard for specific elements required); 4) safety and health training; 5) Medical surveillance program; 6) Employer standard safety and health operating procedures.

All employees, including equipment operators, general laborers, supervisors, and managers who may be exposed to hazardous substances must know who the Hazmat team members and alternates are; and must be trained on potential health and safety hazards at the facility that could impact them; the use of PPE; work practices established to minimize potential exposure to hazards; direction on use of engineering controls and equipment on site; medical surveillance policies and requirements, including an explanation of symptoms and signs that would indicate overexposure to hazards; and the elements of the site safety and health plan.

All Hazmat team members and alternates, in addition to the above mentioned training, must receive a minimum of 40 hours of instruction off site and a minimum of 3 days actual field experience under the direct supervision of the trained supervisor. Employees who are likely to have minimal exposure to threat may receive a minimum of 24 hours of instruction off site, and a minimum of one day of supervised field experience. The training must be documented in the employer files and certificates provided to the trainees.

All Hazmat team members must receive a baseline medical examination which must be documented.

All affected employees, supervisors, and managers must receive update training annually.

All Hazmat team members must receive 8 hours of refresher training each year.

EPA Emergency Response Plan (40 CFR300.215)

If reportable quantities of "extremely hazardous substances" listed in 40 CFR Part 355 are stored on site a facility is required to develop a written emergency response plan that must be submitted to the Local Emergency Planning Commission (LEPC), the local fire department, the nearest hospital, and the State Emergency Response Commission (SERC). The plan must include the following:

- Facility information including address, phone, etc.
- Routes likely to be used to transport the "extremely hazardous substances" to the facility. This could include road maps that have been highlighted to show primary and alternate routes.
- Any other facilities which may contribute to additional risk or be affected due to the proximity to the facility, i.e., hospitals, schools, natural gas facilities, etc.
- Response methods and procedures that must be followed by facility personnel, emergency response agency staff, and medical personnel.
- A primary and secondary facility emergency response coordinator must be designated. The emergency response coordinator will be required to make determinations related to implementing the emergency response plan. Alternate coordinators must also be designated in the event that the primary and secondary coordinator are not on site at the time of an emergency.
- Notification procedures to key facility personnel that a release has occurred. Notification procedures must also be established to notify city, county, state and/or federal agencies in the event of a reportable release.
- Methods for determining a release and potentially affected area or population.
- A description of emergency equipment on site.
- Emergency evacuation plans and procedures for precautionary evacuation and alternative traffic routing.

- Written training programs for affected personnel, records of training and schedules for additional or follow-up training.
- Procedures for emergency response plan drills and records of previous drills.

EPA Risk Management Plan (40 CFR Part 68 Subpart B)

The EPA's 112(r) Risk Management Plan (RMP) requirements is designed to protect the surrounding population from potential harm from chemical releases into the surrounding environment of facilities who store greater than the "threshold quantity" (TQ) (established by EPA) of specific chemicals. There are currently 77 chemical specific toxic substances and 63 chemical specific flammable substances. A RMP is required to be written for each affected facility and submitted to U.S. EPA no later than June 21, 1999. All facilities who use, store, manufacture, handle, move on site, or any combination there of; threshold quantities of specified chemicals is subject to the RMP requirements. At minimum the plan must contain the following:

- Facility registration information
- A hazard assessment which includes worst-case release scenarios
- Accident or release prevention program
- Emergency response program
- Employee training
- Procedures for notifying emergency response agencies and the public
- Routine equipment maintenance program and records of completion
- Compliance review procedures to be conducted every 3 years.
- Management systems to maintain the program and keep the plan current.
- Identification of each covered chemical substance stored on site.
- Inventory of all potential processes containing the RMP regulated chemicals.
- The maximum amount of regulated chemical that could be used in each process must be calculated.

A single written plan will save time, effort and money. The single plan must be *facility specific* (not company specific), and must satisfy each element of the regulations that the facility is required to comply with. The single plan eliminates duplicate or identical elements of each standard. For example, the OSHA Emergency Action and Fire Prevention Standards, the OSHA Hazardous Waste Operations and Emergency Response Standards, and the EPA Emergency Response Plan standards all require facility evacuation maps be posted throughout the facility and copies included in the written plan. With the one plan approach only one copy of evacuation maps is needed in the plan.

If you currently have one or more of these requirements satisfied, but determine your facility is subject to additional requirements it is recommended that you modify and expand your existing plan to satisfy all the requirements specified in the standard. In order to take advantage of the one plan option it is strongly encouraged that the specific regulatory citations which the plan is intended to satisfy are listed (cited) at the beginning of the plan (cover page). These regulations are highlighted within the text of this fact sheet. It is also strongly recommended that you review the full text standard to determine if the regulations affect your facility or additional requirements apply.

Primary Author

Debra Jacobson

University of Illinois Sustainable Technology Center
djacobso@illinois.edu
630.472.5019

Other PNEAC Contacts

Gary Jones
Graphic Arts Technical Foundation
GJones@printing.org
412.741.6860

Wayne Pferdehirt
Solid & Hazardous Waste Education Center
pferdehi@epd.engr.wisc.edu
608.265.2361

Written: August 11, 1998
Revised: August 11, 2003, January 24, 2006

Note: Reasonable effort has been made to review and verify information in this document. Neither PNEAC and it's partners, nor the technical reviewers and their agencies, assume responsibility for completeness and accuracy of the information, or it's interpretation. The reader is responsible for making the appropriate decisions with respect to their operation, specific materials employed, work practices, equipment and regulatory obligations. It is imperative to verify current applicable regulatory requirements with state and/or local regulatory agencies.